## **EUROPEAN PATENT OFFICE**

## Patent Abstracts of Japan

PUBLICATION NUMBER

06349054

PUBLICATION DATE

22-12-94

APPLICATION DATE

: 08-06-93

APPLICATION NUMBER

: 05136294

APPLICANT: FUJI ELECTRIC CO LTD;

INVENTOR: ONODERA KATSUMI;

INT.CL.

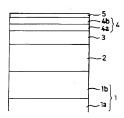
: G11B 5/72 C23C 14/06 C23C 14/34

G11B 5/84

TITLE

: MAGNETIC RECORDING MEDIUM AND

ITS PRODUCTION



ABSTRACT :

PURPOSE: To provide the magnetic recording medium which can deal with a slider material having high hardness, has excellent CCS durability and is capable of attaining high-density recording by formation of a carbon protective film to a small film thickness. CONSTITUTION: The hydrogen-contg, carbon protective film 4 is formed by Ar sputtering in a gaseous atmosphere for sputtering into which methane is incorporated. The carbon protective film 4 has a two-layered film structure consisting of a first carbon film 4a which is a lower layer and a second carbon film 4b which is an upper layer. The first carbon film 4a is a high-hardness film having about 25at. Whydrogen content and 260GPa microhardness. The second carbon film 4b is a film having about 35at. % hydrogen content, about \$50GPa microhardness and resilience. The film thicknesses of the first carbon film 4a and the second carbon film 4b are respectively approximately equalled to about 1007.

COPYRIGHT: (C) JPO